

A method of identifying peptides originating from a particular cell type and being capable of binding to MHC molecules of a particular haplotype is disclosed. The method comprises obtaining a cell type expressing a soluble and secreted form of the MHC molecules of the particular haplotype; collecting the soluble and secreted form of the MHC molecules of the particular haplotype; and analyzing peptides bound to the soluble and secreted form of the MHC molecules of the particular haplotype, thereby identifying the peptides originating from the particular cell type and being capable of binding to MHC molecules of the particular haplotype.